

Attorney's Docket No.:06618-914001

Amendments to the Specification:

At page 4, between paragraphs 12 and 13, kindly insert the following:

Figure 1 shows a prior art ion pump;

Figure 2 shows a schematic of an ion pump using cylindrical anodes;

Figure 3 shows an ion pump with a surrounding magnet, where the cathode is used as a housing; and

Figure 4 shows a schematic of the post cathode portions.

At page 5, please replace paragraph [0017] with the following:

[0017] Figure 2 shows an ion pump in a "noble diode" or differential configuration. The configuration includes a first cathode 200 formed of titanium. A second cathode 205 is formed of tantalum. The walls of the housing are electrically connected to both cathodes. The housing is made separately and usually formed of stainless steel.

At page 6, please replace paragraph [0027] with the following:

[0027] In an embodiment, the magnets disposed on the anode element are formed in a C-shaped configuration and fabricated from rare earth magnet materials such as, Nd-B-Fe and/or Sm-Co, possessing high energy product values. The yoke is fabricated from a high permeability material (hiperco-50A(TM) brand of

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vanadium permendur). . By doing this, the mass of the magnet can be reduced, which hence can reduce the mass of the pump.